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have control over what information is collected about the user, how that information is used, and what information is provided to the user.

A number of embodiments have been described. Nevertheless, it will be understood that various modifications may be made without departing from the scope of the invention. For example, various forms of the flows shown above may be used, with steps re-ordered, added, or removed. Also, although several applications of the systems and methods have been described, it should be recognized that numerous other applications are contemplated. Accordingly, other embodiments are within the scope of the following claims.

Particular embodiments of the subject matter have been described. Other embodiments are within the scope of the following claims. For example, the actions recited in the claims can be performed in a different order and still achieve desirable results. As one example, the processes depicted in the accompanying figures do not necessarily require the particular order shown, or sequential order, to achieve desirable results. In some cases, multitasking and parallel processing may be advantageous.

What is claimed is:

1. A computer-implemented method, comprising:

receiving, by a switch proxy controller, a first request from a first switch fabric, where the first request indicates a first identifier that identifies the first request from other requests from the first switch fabric;

generating, by the switch proxy controller, a second 30 request that indicates a second identifier that identifies the second request from other requests sent from the switch proxy controller to a switch;

providing, by the switch proxy controller, the second request to the switch;

receiving, by the switch proxy controller in response to the second request, a first reply that indicates the second identifier indicated in the second request;

determining, by the switch proxy controller, that information in the first reply corresponds to a rule programmed by a second switch fabric;

generating, by the switch proxy controller and based on the second identifier indicated in the first reply, a second reply that indicates the first identifier and that does not include the information in the first reply 45 determined to correspond to the rule programmed by the second switch fabric;

selecting, by the switch proxy controller, the first switch fabric to receive the second reply based on the second identifier; and

providing, by the switch proxy controller, the second reply to the first switch fabric.

2. The method of claim 1, wherein determining that information in the first reply corresponds to a rule programmed by a second switch fabric comprises:

determining that the information in the first reply that corresponds to the rule programmed by the second switch fabric indicates a rule with a number that is within a range assigned to rules from the second switch fabric.

3. The method of claim 2, wherein determining that the information in the first reply that corresponds to the rule programmed by the second switch fabric indicates a rule with a number that is within a number range assigned to rules from the second switch fabric comprises:

receiving rule range information that indicates that rules with numbers within the number range are programmed

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from the second switch fabric and rules with numbers within another number range are programmed from the first switch fabric.

4. The method of claim **1**, wherein generating, by the switch proxy controller, a second request that indicates a second identifier that identifies the second request from other requests sent from the switch proxy controller to a switch comprises:

including, in the second request, the first identifier instead of the second identifier; and

including, in the second request, programming instructions in the first request.

5. The method of claim 1, wherein generating, by the switch proxy controller and based on the second identifier indicated in the first reply, a second reply that indicates the first identifier and that does not include the information in the first reply determined to correspond to the rule programmed by the second switch fabric comprises:

identifying the first identifier based on the second identifier:

including, in the second reply, the first identifier instead of the second identifier; and

including, in the second reply, information in the first reply that indicates that programming instructions were executed by the switch.

6. The method of claim 1, wherein selecting, by the switch proxy controller, the first switch fabric to receive the second reply based on the second identifier comprises:

identifying a particular mapping based on the second identifier; and

identifying the first switch fabric from the particular mapping.

7. The method of claim 1, wherein generating, by the switch proxy controller, a second request that indicates a second identifier that identifies the second request from other requests sent from the switch proxy controller to a switch comprises:

generating an entry in a mapping data structure where the mapping that indicates the second identifier corresponds to the first identifier and the first switch fabric,

wherein selecting, by the switch proxy controller, the first switch fabric to receive the second reply based on the second identifier is based on the mapping; and

the method comprises:

in response to providing, by the switch proxy controller, the second reply to the first switch fabric, removing the mapping from the mapping data structure.

8. The method of claim 1, wherein the first identifier indicates an order of the first request in requests sent from the first switch fabric to the switch proxy controller across a connection established between the first switch fabric and the switch proxy controller, and the second identifier indicates an order of the second request in requests sent from the switch proxy controller to the switch across a connection established between the switch proxy controller and the switch.

9. A system comprising:

one or more computers and one or more storage devices storing instructions that are operable, when executed by the one or more computers, to cause the one or more computers to perform operations comprising:

receiving, by a switch proxy controller, a first request from a first switch fabric, where the first request indicates a first identifier that identifies the first request from other requests from the first switch fabric;

generating, by the switch proxy controller, a second request that indicates a second identifier that identifies